

## REMARKS

### Status of Case

Claims 1-58 are currently pending in this case.

### Claim Rejections under 35 U.S.C. §§102, 103

Claims 4, 5, 7, 9, 11, 12, 15, 16, 21, 22, 24-26, 33, 34, 37, and 38 were rejected under 35 U.S.C. 102(b) as being anticipated by Gerzon et al. (U.S. Patent No. 5,757,927). Claims 6 and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gerzon et al. in view of Vaughan et al. (U.S. Patent Application No. 2004/0114771). Claims 13, 14, 27, and 30 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gerzon et al. in view of Liu (U.S. Patent No. 6,349,285). Claims 17 and 36 were allowed, and claims 8, 10, 18-20, 28, 29, and 35 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The Gerzon reference teaches that the low and high frequency signals are matrix decoded, as shown in Fig. 10:

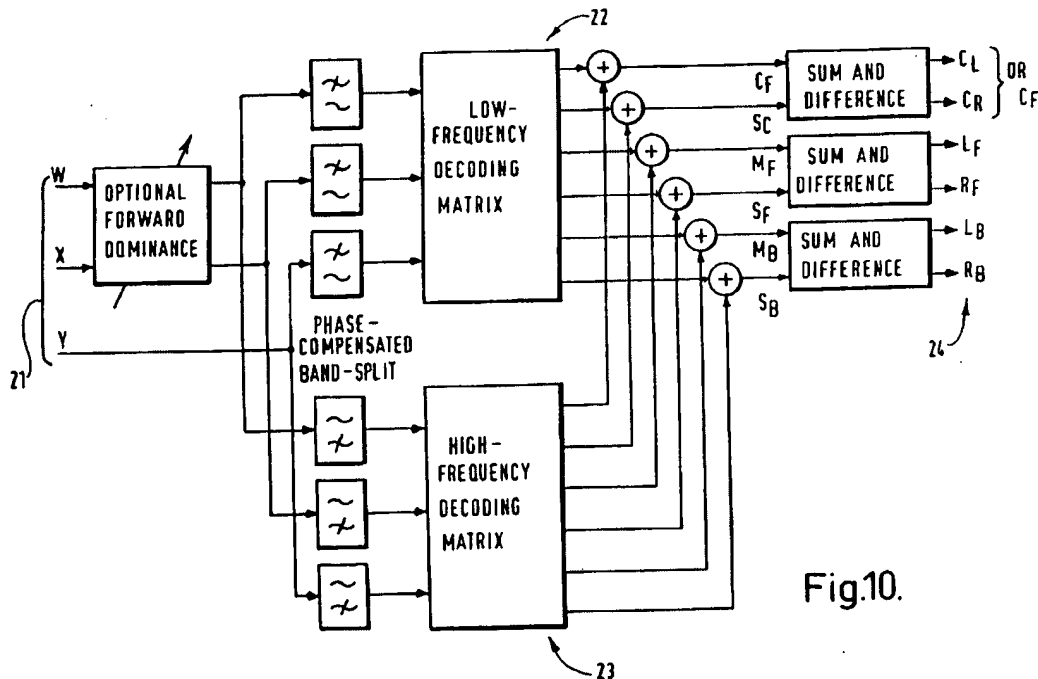


Fig.10.

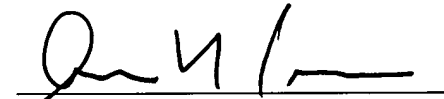
Specifically, as shown in the above figure, the low frequencies are decoded using low-frequency decoding matrix 22 and the high frequencies are decoded using high-frequency decoding matrix 23.

In contrast to the Gerzon reference, claims 4, 21, 37, and 38 recite that the low-frequencies bypass any decoding. See claim 4 (“bypassing decoding of the plurality of low frequency input signals by any matrix decoding technique”); claim 21 (“a plurality of low frequency input channels in communication with the bass management module, configured to separately communicate each of the plurality of low frequency input signals, and bypass any matrix decoder module, where the plurality of low frequency input signals and the plurality of high frequency output signals comprise the plurality of audio output signals”); claim 37 (“a plurality of low frequency input channels in communication with the bass management module configured to separately communicate each of the plurality of low frequency input signals, and bypass any matrix decoder module, where the plurality of low frequency input signals and the plurality of high frequency output signals comprise the plurality of audio output signals”); and claim 38 (“means for separately communicating each of the plurality of low frequency input signals and bypassing any matrix decoder means, where the plurality of low frequency input signals and the plurality of high frequency output signals comprise the plurality of audio output signals”). Decoding the low frequencies, such as in the Gerzon reference, may result in unnatural effects that may result from steered low frequency signals, as discussed, for example, in paragraph 16 of the present application. Similar, the Vaughn reference and the Liu reference fail to teach bypassing any decoding of the low frequencies. Therefore, the claims are patentable over the cited references.

**SUMMARY**

Applicant respectfully requests the Examiner to grant early allowance of this application. The Examiner is invited to contact the undersigned attorneys for the Applicant via telephone if such communication would expedite this application.

Respectfully submitted,

  
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